CLAIMS:

1. In a digital imaging system receiving document images, a method for optimizing a rendition thereof, comprising:

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      receiving a document image representation in a form suitable for processing; and,

      processing the document image in an image processing system to selectively soften shape edges therein in order to improve the printing of such

10   document image.

2. The digital imaging system of claim 1, wherein the image processing system includes a digital front end.

15   3. The digital imaging system of claim 1, wherein the processing includes morphologically manipulating the document image.

4. The digital imaging system of claim 3, wherein morphological manipulation comprises:

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      trapping the objects in the document image;
      generating a tag for the trap results; and
      rendering according to the tags those trap results.

25   5. The digital imaging system of claim 4, wherein rendering comprises:

      dithering the trap results.

6. The digital imaging system of claim 5, wherein the dithering is of a higher

30   frequency type than that employed by the digital imaging system to the remainder of the image.

7. The digital imaging system of claim 5, wherein the dithering is of a dispersed type.

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8. The digital imaging system of claim 4, wherein the dithering is of a stochastic type.

9. The digital imaging system of claim 1, wherein processing to selectively soften shape edges comprises:

using a convolution with low pass filter.

10. The digital imaging system of claim 1, wherein processing to selectively soften shape edges comprises:

using values in a look up table.

11. The digital imaging system of claim 1, wherein processing to selectively soften shape edges means providing a gradient sloping down of pixel values relative to the edge pixel values.

12. The digital imaging system of claim 1, wherein processing to selectively soften shape edges means providing a gradient sloping up of pixel values relative to the edge pixel values.

13. The digital imaging system of claim 1, wherein processing to selectively soften shape edges means providing a lowering of pixel values relative to the edge pixel values.

14. The digital imaging system of claim 1, wherein processing to selectively soften shape edges means providing higher pixel values relative to the edge pixel values.

15. The digital imaging system of claim 3, wherein morphological manipulation comprises:

storing the document image in a first memory space;

replicating the document image as a working image in a second memory space;

selectively dilating the working image to produce a first resultant working image;

isolating the selectively dilated areas in the first resultant working image to produce a second resultant working image;

halftoning the isolated selectively dilated areas in the second resultant working image; and,

performing an XOR operation of the second resultant working image with the document image in the first memory space, to thus produce selectively softened edges in the stored document image.